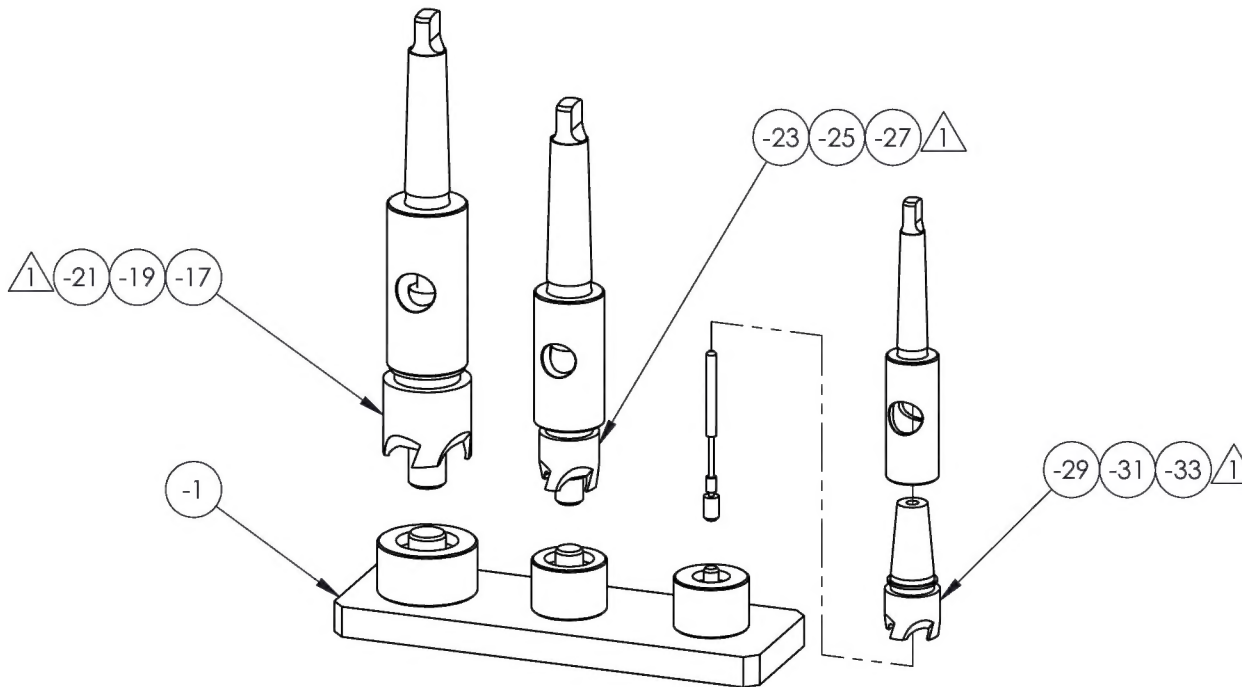


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REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED



UNDER REVIEW

URF 19-1018 19.10.26 (VM)

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	X		-1	1	BASE ASSEMBLY			2
1			-3		BASE	6061		3
1			-5		020.01 BASE	6061		4
1			-7		020.01 PIN	SS 303/304/316		5
1			-9		030.01 BASE	6061		6
1			-11		030.01 PIN	SS 303/304/316		7
1			-13		040.01 BASE	6061		8
1			-15		040.01 PIN	SS 303/304/316		9
			-17	1	030.01 CUTTER	STEEL	(STEINER TECH/H. BILZ # R1000292) MODIFIED	10
		B/O	-19	1	030.01 HOLDER	STEEL	(STEINER TECH/H. BILZ # H1502)	1
		B/O	-21	1	030.01 PILOT	STEEL	(STEINER TECH/H. BILZ # GZ1501500)	1
			-23	1	020.01 CUTTER	STEEL	(STEINER TECH/H. BILZ # R1000293) MODIFIED	11
		B/O	-25	1	020.01 HOLDER	STEEL	(STEINER TECH/H. BILZ # H1402)	1
		B/O	-27	1	020.01 PILOT	STEEL	(STEINER TECH/H. BILZ # GZ1401100)	1
			-29	1	040.01 CUTTER	STEEL	(STEINER TECH/H. BILZ # R1000294) MODIFIED	12
		B/O	-31	1	040.01 HOLDER	STEEL	(STEINER TECH/H. BILZ # H1301)	1
		B/O	-33	1	040.01 PILOT	STEEL	(STEINER TECH/H. BILZ # GZ1300600)	1

NOTES:

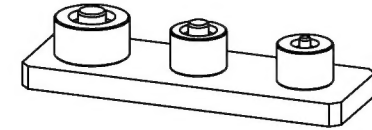
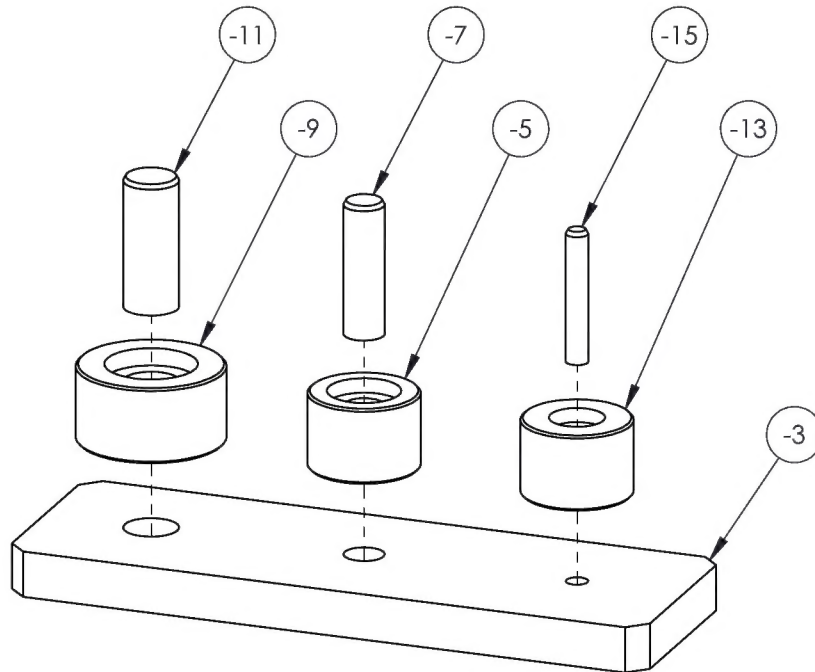
1. TIGHTEN NUTS SO THE PILOT IS FLUSH BUT STILL ROTATES FREELY.
2. REF. EUROCOPTER/AIRBUS T/N 105-31781W2.

DART
AEROSPACE

TITLE		MILLING TOOL	
DWG NO.		RBE105-31781W2	
REV			
MAT'L		UNLESS OTHERWISE SPECIFIED	
TREAT		DIMENSIONS ARE IN INCHES	
FINISH		.XXX ± .005 FRACTIONS ± 1/8	
SPEC		.XX ± .01 ANGLES ± 5°	
DRAWN BY:		.X ± .1 SURFACES = 125°	
CHECKED:		1. BREAK ALL SHARP EDGES	
OPPS APPR:		.015 x 45° OR .015R	
QA APPR:		2. DIMENSIONAL LIMITS APPLY	
APPROVED:		AFTER PLATING	
SCALE		3. INTERPRET DIM AND TOL PER	
1:3		ASME Y14.5M-2009	
DATE		USED ON MODEL	
04/08/2017		EC145, H145	
SHEET 1 OF 12			

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				APPROVED



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URF 19-1018 19.10.26 (VM)

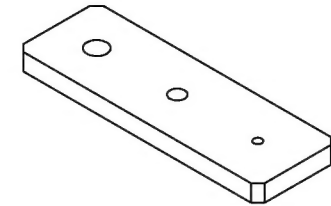
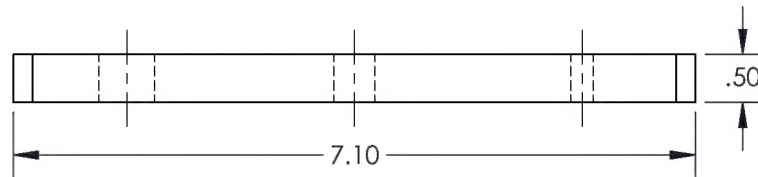
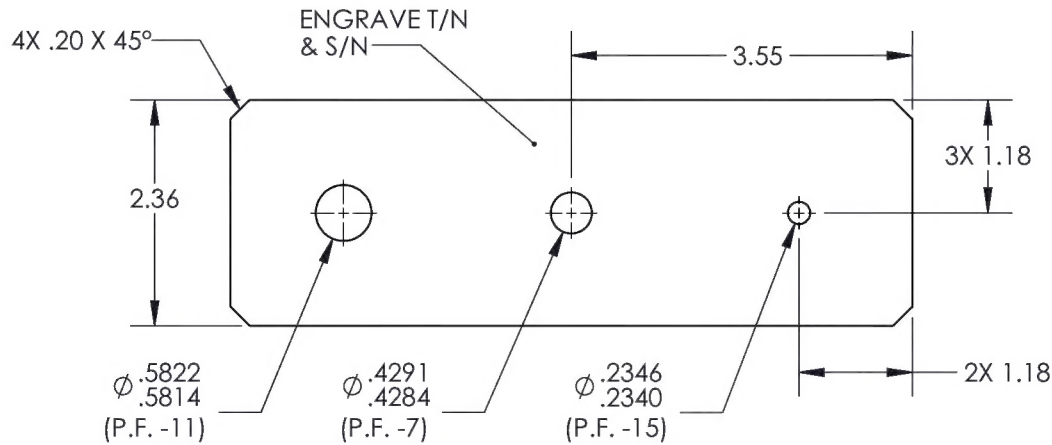
NOTE:
PRESS ALL PINS IN SO THAT NON-CHAMFERD END IS
FLUSH WITH BOTTOM OF -3.

(-1)
BASE ASSEMBLY

DART AEROSPACE	
TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-1	REV ?
MAT'L TREAT FINISH SPEC	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125°
DRAWN BY: MACKOVJAK	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:	USED ON MODEL
APPROVED:	EC145, H145
SCALE 1:2	DATE 04/08/2017
SHEET 2 OF 12	

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REVISIONS				
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				APPROVED



UNDER REVIEW

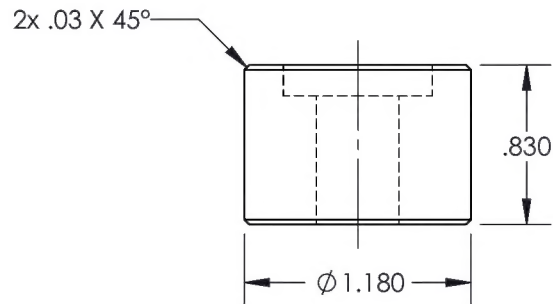
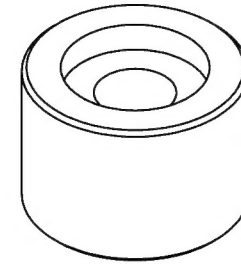
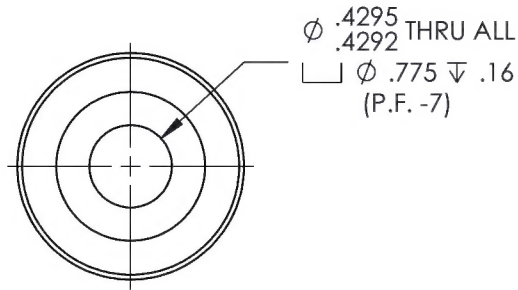
URF 19-1018 19.10.26 (VM)

(-3)
BASE

DART AEROSPACE	
TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-3	REV
MAT'L 6061 HEAT TREAT FINISH CLEAR ANODIZE SPEC MIL-A-8625F, TYPE II, CLASS I DRAWN BY: MACKOVJAK CHECKED: OPPTS APPR: QA APPR: APPROVED:	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125° 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL EC145, H145	
SCALE 1:2	DATE 04/08/2017
SHEET 3 OF 12	

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UNDER REVIEW

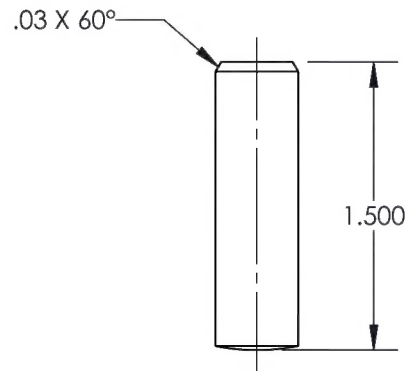
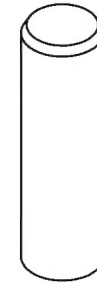
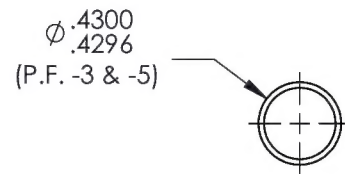
URF 19-1018 19.10.26 (VM)

⑤
020.01 BASE

DART AEROSPACE	
TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-5	REV
MAT'L 6061	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH CLEAR ANODIZE	.XXX ± .005 FRACTIONS ± 1/8
SPEC MIL-A-8625F, TYPE II, CLASS I	.XX ± .01 ANGLES ± .5°
DRAWN BY: MACKOVJAK	.X ± .1 SURFACES = 125/✓
CHECKED:	1. BREAK ALL SHARP EDGES
OPPS APPR:	.015 x 45° OR .015R
QA APPR:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	USED ON MODEL
DATE 04/08/2017	EC145, H145
SHEET 4 OF 12	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



UNDER REVIEW

URF 19-1018 19.10.26 (VM)

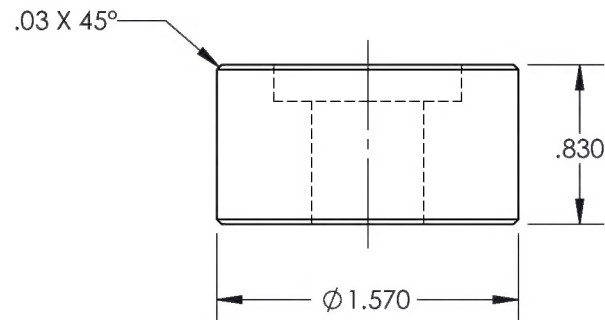
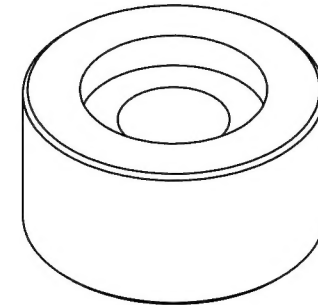
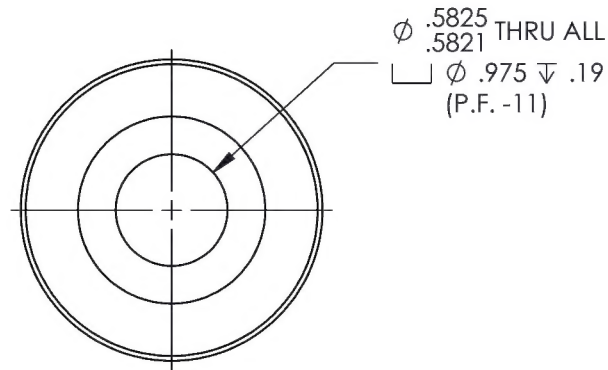
(-7)

020.01 PIN

TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-7	REV
MAT'L SS 303/304/316 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125✓	
SPEC	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY:	MACKOVJAK
CHECKED:	
OPPS APPR:	
QA APPR:	
APPROVED:	USED ON MODEL
SCALE	1:1
DATE	04/08/2017
SHEET 5 OF 12	

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				APPROVED



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(-9)

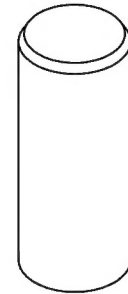
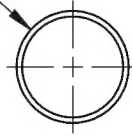
030.01 BASE

DART AEROSPACE	
TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-9	REV
MAT'L 6061	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH CLEAR ANODIZE	.XXX ± .005 FRACTIONS ± 1/8
SPEC MIL-A-8625F, TYPE II, CLASS I	.XX ± .01 ANGLES ± .5°
DRAWN BY: MACKOVJAK	.X ± .1 SURFACES = 125 ✓
CHECKED:	1. BREAK ALL SHARP EDGES
OPPS APPR:	.015 x 45° OR .015R
QA APPR:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	USED ON MODEL
DATE 04/08/2017	EC145, H145
SHEET 6 OF 12	

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				APPROVED

ϕ .5830
 ϕ .5827
 (P.F. -3 & -9)



.03 X 60°



1.470

UNDER REVIEW

URF 19-1018 19.10.26 (VM)

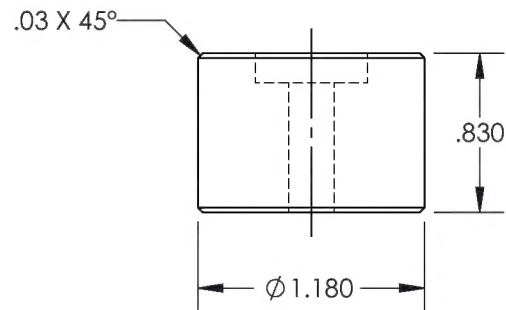
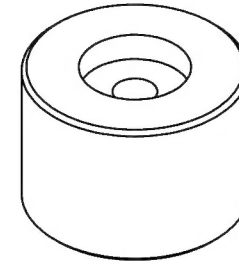
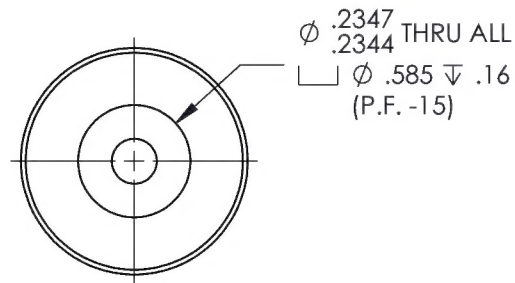
(-11)

030.01 PIN

TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-11	REV
MAT'L SS 303/304/316 TREAT FINISH SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1 SURFACES = 125° ✓	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: MACKOVJAK	
CHECKED:	
OPPS APPR:	
QA APPR:	
APPROVED:	USED ON MODEL
	EC145, H145
SCALE 1:1	DATE 04/08/2017
	SHEET 7 OF 12

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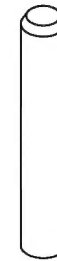
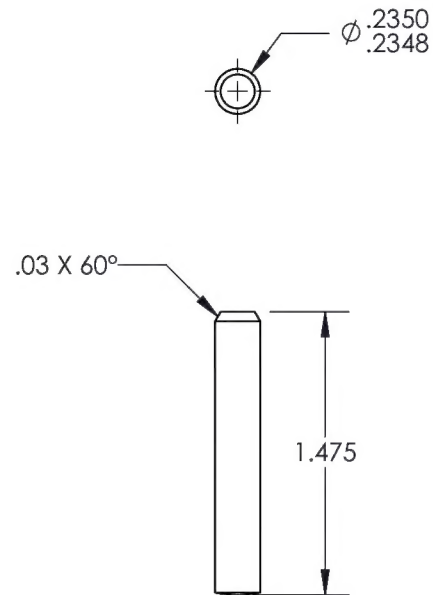
(-13)

040.01 BASE

DART AEROSPACE	
TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-13	REV
MAT'L 6061	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH CLEAR ANODIZE	.XXX ± .005 FRACTIONS ± 1/8
SPEC MIL-A-8625F, TYPE II, CLASS I	.XX ± .01 ANGLES ± .5°
DRAWN BY: MACKOVJAK	.X ± .1 SURFACES = 125✓
CHECKED:	1. BREAK ALL SHARP EDGES
OPPS APPR:	.015 x 45° OR .015R
QA APPR:	2. DIMENSIONAL LIMITS APPLY
APPROVED:	AFTER PLATING
SCALE 1:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 04/08/2017	USED ON MODEL
SHEET 8 OF 12	EC145, H145

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				APPROVED



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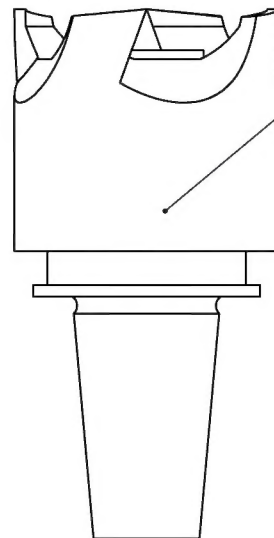
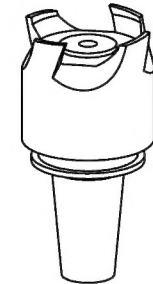
URF 19-1018 19.10.26 (VM)

(-15)
040.01 PIN

DART AEROSPACE	
TITLE MILLING TOOL	
DWG NO. RBE105-31781W2-15	REV
MAT'L SS 303/304/316	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
DRAWN BY: MACKOVJAK	.X ± .1 SURFACES = 125° ✓
CHECKED:	1. BREAK ALL SHARP EDGES
OPPS APPR:	.015 x 45° OR .015R
QA APPR:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE 1:1	USED ON MODEL
DATE 04/08/2017	EC145, H145
SHEET 9 OF 12	

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LASER ENGRAVE P/N, "030.01"

UNDER REVIEW

URF 19-1018 19.10.26 (VM)

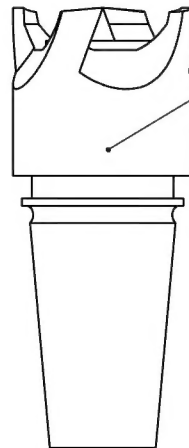
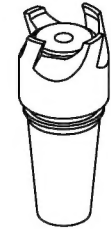
(-17)

030.01 CUTTER

	
TITLE CUTTING TOOL	
DWG NO. RBE105-31781W2-17	REV
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED
HEAT TREAT	DIMENSIONS ARE IN INCHES
FINISH	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± .5°
DRAWN BY: MACKOVJAK	.X ± .1 SURFACES = 125° ✓
CHECKED:	1. BREAK ALL SHARP EDGES
OPPS APPR:	.015 x 45° OR .015R
QA APPR:	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
APPROVED:	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
SCALE	USED ON MODEL
1:1	EC145, H145
DATE	04/08/2017
	SHEET 10 OF 12

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LASER ENGRAVE P/N, "020.01"

UNDER REVIEW

URF 19-1018 19.10.26 (VM)

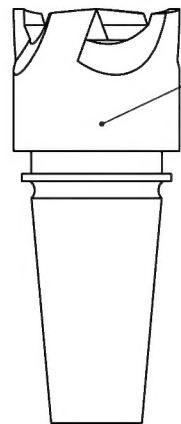
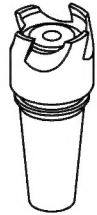
(-23)

020.01 CUTTER

DART AEROSPACE																				
TITLE CUTTING TOOL																				
DWG NO. RBE105-31781W2-23	REV																			
<table border="1"> <tr> <td>MAT'L STEEL</td> <td rowspan="4"> UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125° ✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 </td> </tr> <tr> <td>HEAT TREAT</td> </tr> <tr> <td>FINISH</td> </tr> <tr> <td>SPEC</td> </tr> <tr> <td>DRAWN BY: MACKOVJAK</td> <td>USED ON MODEL</td> </tr> <tr> <td>CHECKED:</td> <td>EC145, H145</td> </tr> <tr> <td>OPPS APPR:</td> <td></td> </tr> <tr> <td>QA APPR:</td> <td></td> </tr> <tr> <td>APPROVED:</td> <td></td> </tr> <tr> <td>SCALE 1:1</td> <td>DATE 04/08/2017</td> </tr> <tr> <td colspan="2">SHEET 11 OF 12</td> </tr> </table>		MAT'L STEEL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125° ✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	HEAT TREAT	FINISH	SPEC	DRAWN BY: MACKOVJAK	USED ON MODEL	CHECKED:	EC145, H145	OPPS APPR:		QA APPR:		APPROVED:		SCALE 1:1	DATE 04/08/2017	SHEET 11 OF 12	
MAT'L STEEL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ±.5° .X ± .1 SURFACES = 125° ✓ 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009																			
HEAT TREAT																				
FINISH																				
SPEC																				
DRAWN BY: MACKOVJAK	USED ON MODEL																			
CHECKED:	EC145, H145																			
OPPS APPR:																				
QA APPR:																				
APPROVED:																				
SCALE 1:1	DATE 04/08/2017																			
SHEET 11 OF 12																				

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				APPROVED



LASER ENGRAVE P/N, "040.01"

UNDER REVIEW

URF 19-1018 19.10.26 (VM)

(-29)

040.01 CUTTER

DART AEROSPACE																				
TITLE CUTTING TOOL																				
DWG NO. RBE105-31781W2-29	REV																			
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